

PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the reconstruction of existing Traffic Control Signals at the intersection of US 1 and Farragut Street in Prince George's County. US 1 is assumed to run a north-south direction. The signal shall be interconnected to Gallatin Street to the north and to 42nd Place / Crittenden Street to the south.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA three-phase, semi-actuated mode, with the US 1 approaches running concurrently. Pedestrian phases with pushbutton actuation shall be provided across the south leg of US 1. The existing pedestrian phase across Farragut Street shall remain on recall. Farside sampling stations shall be provided on both legs of US 1 at this intersection. The Farragut Street approach shall run in its own phase. Detection shall be provided via video detection.
- A full-traffic-actuated, eight-phase controller with all necessary equipment and a master ASC 2M controller housed in a master base-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- Upon completion of this project, the Contractor shall notify Mr. Robert Snyder at (410) 787-7631 to arrange for the phone line installation at US 1 and Farragut Street. The Contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and phone number.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9041	Cabinet, master w/ telemetry and controller.	1 EA
9045	Controller, master ASC 2M with telemetry.	1 EA
9086	Video detection interface equipment: 1-4 cameras (To be installed by signal shop).	1 EA
9571	Sheet aluminum signs to consist of: (most arm or pole mount)	62.5 SF
	D3-2 "Farragut St" sign, (variable x 16") (dual faced), most arm mounted.	1 EA
	D3-2 "(arrow) Baltimore Ave / Rhode Island Ave (arrow)" sign, (variable x 32") (dual faced), most arm mounted.	1 EA
	R10-11b "NO TURN ON RED" sign, (24"x24") most arm mounted.	1 EA
	GUIDE SHIELD ASSEMBLY (36"x75") pole mounted. M3-1 "NORTH" (30"x15") M1-4 "US 1" (36"x36") M6-1 "left arrow" (30"x24")	1 EA
	GUIDE SHIELD ASSEMBLY (24"x51") pole mounted. M3-3 "SOUTH" (24"x12") M1-4 "US 1" (30"x24") M6-1 "right arrow" (21"x15")	1 EA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
2001	Class 2 Excavation.	3 C.Y.
2002	Test Pit Excavation	4 C.Y.
5005	12" white heat applied permanent preformed thermoplastic pavement marking.	90 L.F.
5006	24" white heat applied permanent preformed thermoplastic pavement marking.	50 L.F.
6004	4" concrete sidewalk.	240 S.F.

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
8001	Furnish and install concrete for signal foundation.	9 C.Y.
8002	Furnish and install 12" pedestrian signal head section	4 EA
8008	Pre-manufactured camera to controller (200' length) cable	3 EA
8019	Remove and dispose of existing material and equipment per assignment.	1 EA
8027	Detectable warning system (truncated domes).	40 SF
8031	Furnish and install No. 6 AWG stranded bare copper ground wire.	340 L.F.
8034	Furnish and install 3" electrical conduit - galvanized riser.	70 L.F.
8035	Furnish and install 3" weatherhead.	2 EA
8038	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - bored.	70 L.F.
8039	Furnish and install 2" schedule 80 rigid polyvinyl chloride - trenched.	70 L.F.
8040	Furnish and install 3" schedule 80 rigid polyvinyl chloride - trenched.	30 L.F.
8041	Furnish and install 4" schedule 80 rigid polyvinyl chloride - trenched.	95 L.F.
8046	Metered service pedestal.	1 EA
8048	Furnish and install electrical cable 1-conductor No. 4 AWG THHN/THWN.	35 L.F.
8054	Furnish and install electrical handhole.	3 EA
8057	Install overhead sign.	62.5 S.F.
8058	Furnish and install video detector camera.	1 EA
8062	27' steel pole and twin 50' (cut to 30') / 50' (cut to 40') mast arms.	1 EA
8064	Furnish and install 27' (cut to 21') mast arm pole and 50' (cut to 40') mast arm.	1 EA
8075	Furnish and install ground rod 3/4" x 10'.	4 EA
8077	Furnish and install 12" vehicular traffic signal head section	21 EA
8080	Cut, clean, galvanize and cap traffic signal structure.	4 EA
8083	Furnish and install electrical cable - 2 conductor (No. 14 AWG).	220 L.F.
8085	Furnish and install electrical cable - 5 conductor (No. 14 AWG).	585 L.F.
8086	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	480 L.F.
8090	Pedestrian pushbutton and R10-4(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS BALTIMORE AVE".)	2 EA
8096	Install controller and cabinet base mount.	1 EA
Neg.	Furnish and install electrical cable - 1 conductor (No. 250 KCMIL)	210 LF

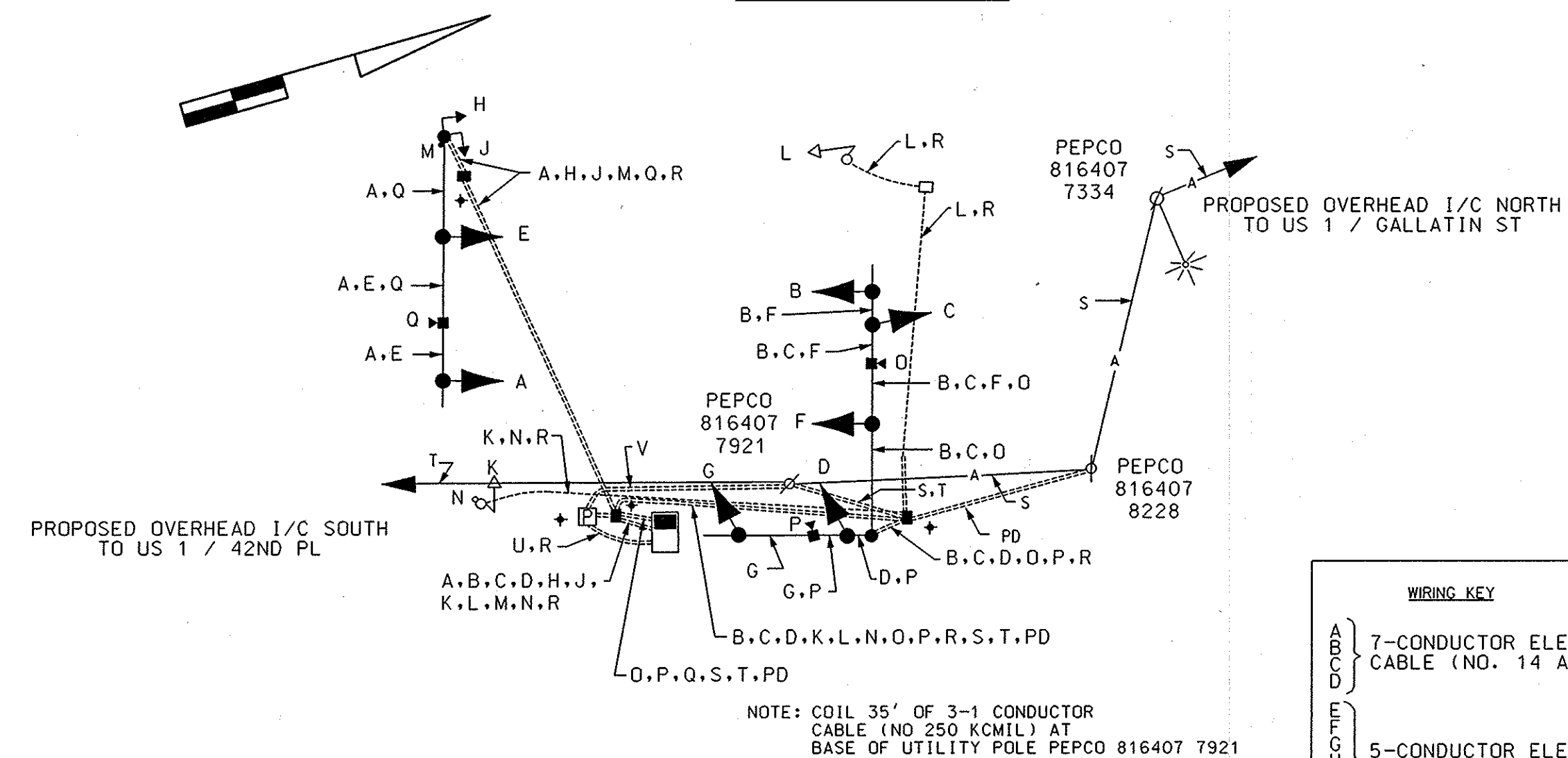
C. EQUIPMENT TO BE REMOVED

SHA Forces shall remove the controller and all auxiliary equipment from the controller cabinet. The cabinet and all other removed signal materials are to become property of the contractor.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)
PHASE 2 & 6	G	G	G	G	G	R	R	WK	WK	DW	DW
PED CLEAR	G	G	G	G	G	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	G	G	DW	DW	WK	WK
PEED CLEAR	R	R	R	R	R	G	G	DW	DW	FL/DW	FL/DW
4 CHANGE ALT	R	R	R	R	R	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK

WIRING DIAGRAM



The contact persons for District #3 (Prince George's County) are as follows:

Mr. Majid Shakib
Assistant District Engineer - Traffic
Phone: (301) 513-7358

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
Assistant District Engineer - Utility
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Ed Rodenhizer
Signal Shop
410-787-7652

Mr. Sonny Bailey
Signal Shop
410-787-7670

The power company representative is:

Mr. Richard Chilcoat
PEPCO
8300 Old Marlboro Pike
Upper Marlboro, MD 20772



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION			
US 1 AND FARRAGUT STREET			
SHA # 2001-001-001			
DRAWN BY: RC	F.A.P. NO. AT5665185	TS NO. 11300	SHEET NO. 2 OF 2
CHECKED BY: NONE	S.H.A. NO. PRINCE GEORGE'S	COUNTY: T.I.M.S. NO. 6633	
SCALE: 2/15/05	LOG MILE: 16000101.71		